

# We are in the same Boat

Design Teams  
Ships Store



# Ships Store Program

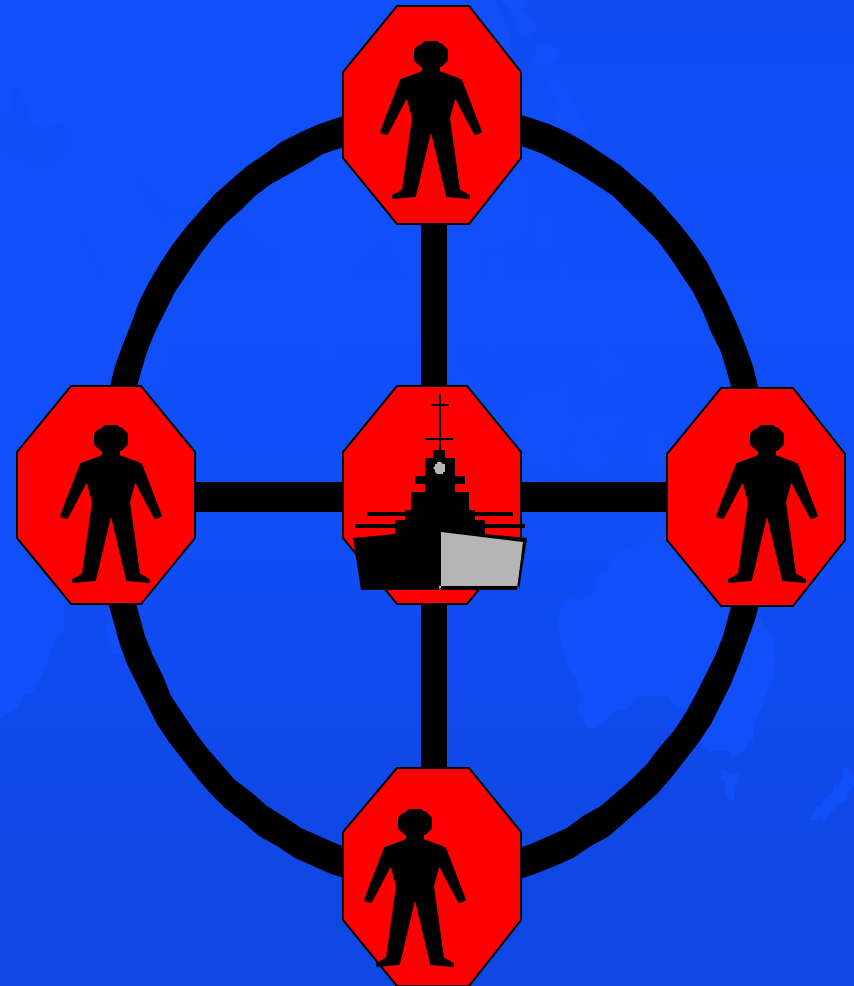
A Fleet Service Quality of life  
Provider



# Ships Stores

## One Element of QoL

- ◆ Ships Stores
- ◆ Food
- ◆ Recreational
- ◆ Self Improvement



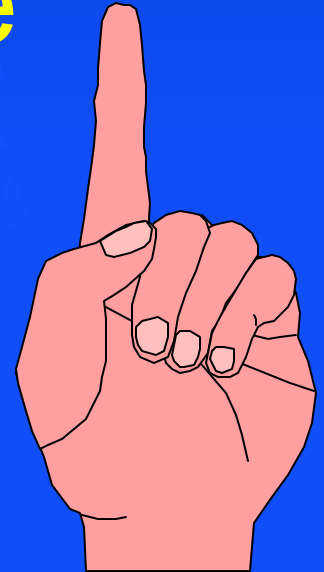
# Mission of Ships Store

- ◆ Provide a convenient & reliable source to obtain items necessary in day to day living at a savings
- ◆ Provide services necessary for daily living
- ◆ Provide funds for recreation of crew
- ◆ Promote morale / Quality of Life

# Our Strategy for Change

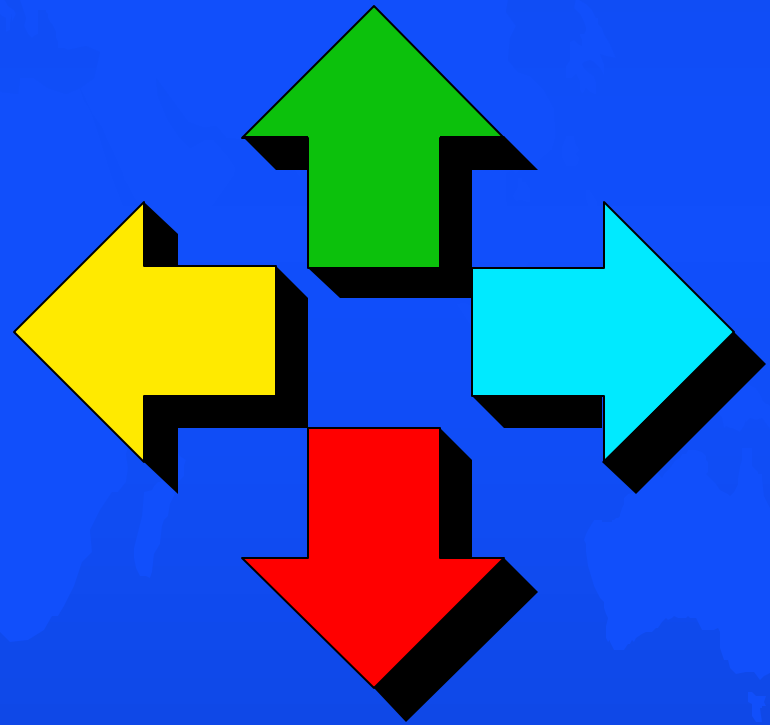
## Our Wish for the Future

- ◆ Automate wherever possible
- ◆ Simplify wherever possible
- ◆ Re-engineer the Process
- ◆ Keep QoL in forefront
- ◆ **Obtain Ship Designs that actively  
Facilitate Accomplishing a Work Process**



# Sailors belong on ships Ships belong at Sea

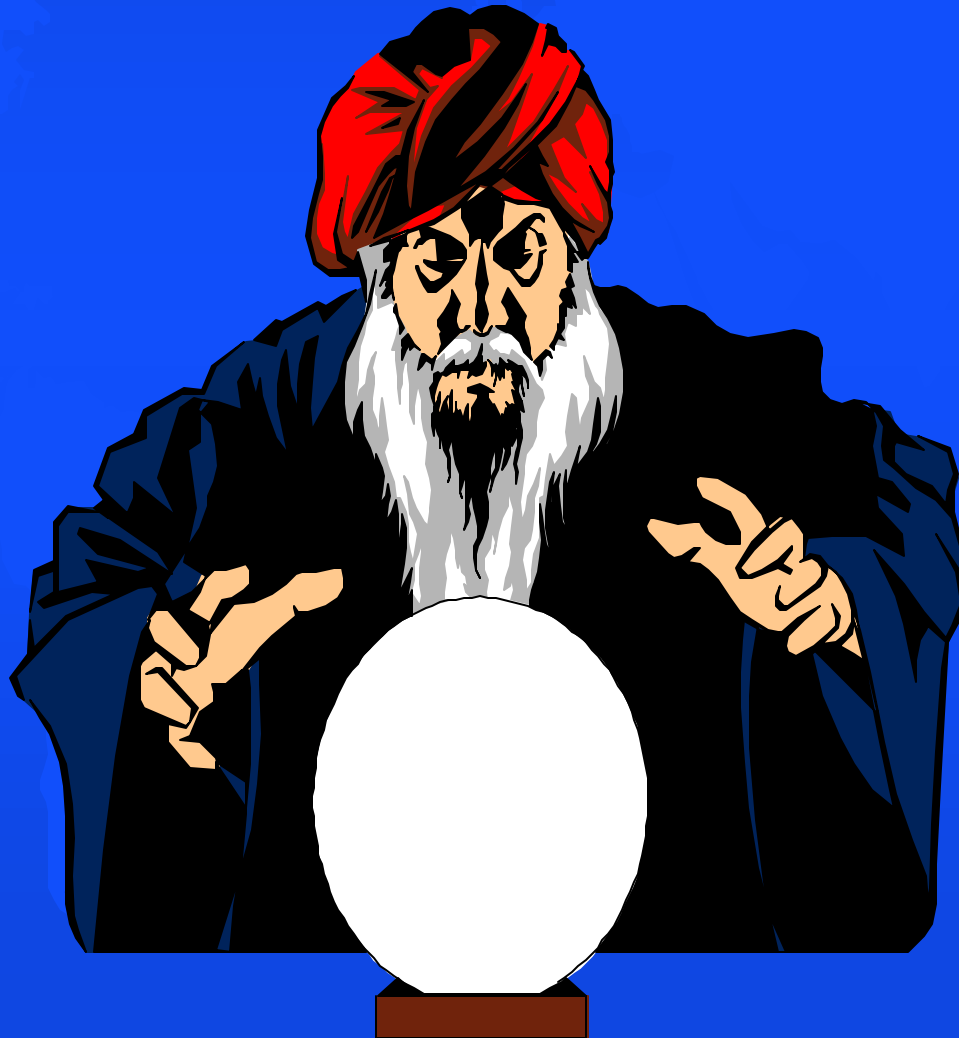
- ◆ 52% at sea  
Somewhere
- ◆ 32% on extended  
deployment
- ◆ True QoL  
enhancement is sea  
based



# Assumptions

- ◆ S-3 are basic services that are essential QoL
  - recruiting issue
  - retention issue
- ◆ Good Design:
  - facilitates shipboard life
  - improves work content and flow
- ◆ Configuration will be able to be maintained
- ◆ Well designed Space Allotted to QoL is better than “ad hoc” .

# Looking into Future





# Retail Stores

- ◆ **Size:** .60 ft/ per accommodation
- ◆ **Location:** Amidships, next to storerooms
- ◆ **Access:** clear path to storeroom/pier
- ◆ **Aids:** mechanical, built in or portable'  
useable end to end
- ◆ **Automation:** LANs for check-in&out
- ◆ **Fixtures:** Just in Time, modern shelving

# Store Features

- ◆ Cashless transactions  
with Navy Cash system – needs LAN connections
- ◆ Records move ashore via Comm Suite
- ◆ Stock is pre-planned
  - basic items held on board
  - luxury items ordered via internet
  - e-commerce to help Sailor, ship, family

# Vending Services

- ◆ Can is Efficient and Loved
- ◆ Labor Intensive when moved
- ◆ Ship Design drives workload
- ◆ A Sailor “Must Have”



# Vending

- ◆ **Location:** near storeroom to service them
- ◆ **Storerooms:** clear path to machine / pier
- ◆ **Aids:** portable or built in
- ◆ **Ergonomics:** Think how serviced and used
- ◆ **Out of Box Options are possible**
  - chilled store rooms with dispensing doors
  - chilled bulk sales



# Storerooms

## Retail and Vending

- ◆ Size: OPNAV std and square as possible
- ◆ Access: Close to end use station / pier
- ◆ Distribution: Outside Access for all stores for movement to central co-located location
- ◆ Aids: mechanical / built in/ Just in time
- ◆ Environment: AC to lengthen shelf life
- ◆ Automation: LAN for check in & out

# Barber Services

- ◆ Hair Cutting has not changed over the ages
  - One-on-one Experience
- ◆ Will be needed in Future
- ◆ Navy Requirement for professional Appearance expected to remain
- ◆ If Navy requires haircuts, got to have barbershops



# How We See It

- ◆ Ships will require a mix
  - Bulk Washers for organizational and uniforms
  - Self Service for crew member personal items
- ◆ All electric laundry
- ◆ NO dry cleaning & limited or no pressing
- ◆ NO tailoring, repair, or embroidery

# Processing Clothing

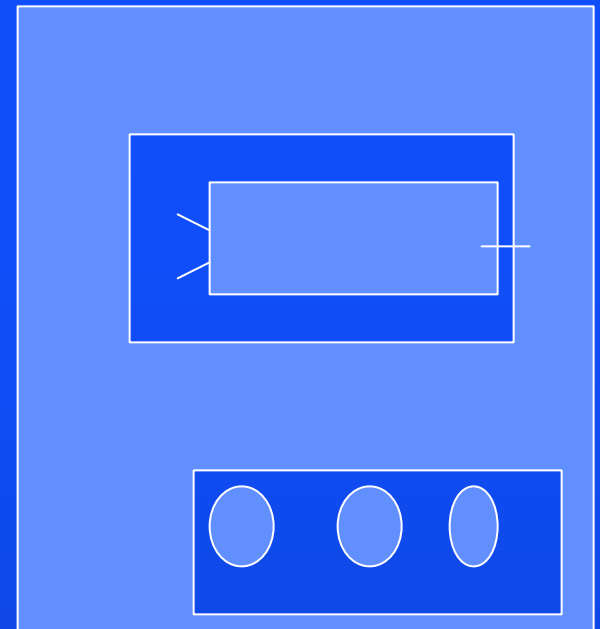
- ◆ Bulk Washers / Dryers are the way to go for Work/Organization items for greatest efficiency
- ◆ All laundry areas have common theme
  - labor intensive movement “to and from”
  - Event is time driven





# Bulk Laundry Wash Deck

- ◆ Electric Laundry (good for 15 years)
  - Simpler maintenance
  - requires another generator (hot water, dryers)
- ◆ PLC Controller
  - Simple as 1,2,3
  - Fire and Forget
- ◆ Solid Cake Systems
  - Saves Space & Money Simplifies Process

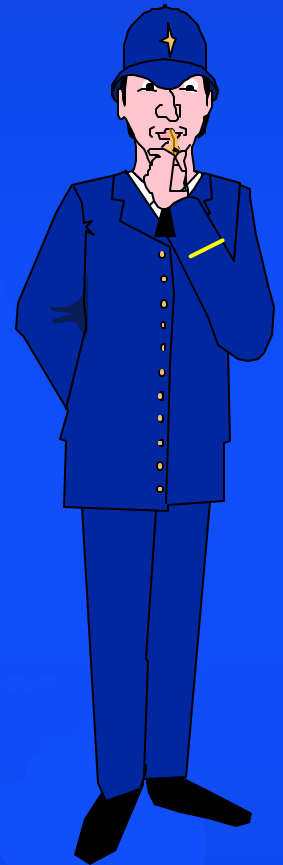


# Bulk Drying Clothing

- ◆ Simply: Hot Air in a Box
- ◆ Largest Inefficiency in Process
- ◆ Potential for lots of bad stuff
  - fires, heat stress, melted clothing
- ◆ Steam is the most efficient for drying but has high maintenance “cost” Electric is the best means in the future

# Pressing of Clothing

- ◆ No New Innovation
- ◆ Have tried civilian automated systems
  - Hog and Sag issues
  - Maintenance Issues
  - Training Issues
- ◆ IF Navy keeps pressing, current systems are the best worst solution.



# Pressing Clothing

- ◆ Question is not how but IF
- ◆ Right now: Requirement still exists
- ◆ Future: Coveralls may answer question.
- ◆ Camel nose in Tent problem (if you get Yours pressed , why not me)

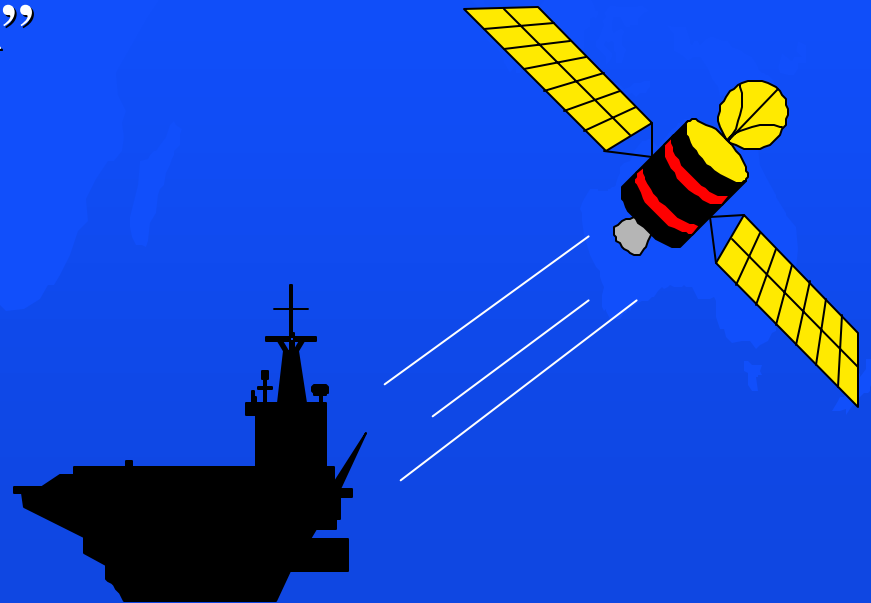


# At Sea Telephones is defining Afloat QoL Element

“The phones were an absolute success and more popular than ever envisioned as 2,600 Sailors and marines bought over 39,000 cards during deployment.

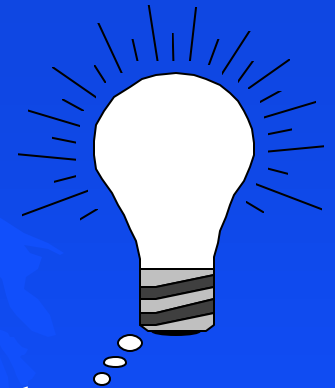
They were unequivocally the single most important aspect of our deployed Quality of Life equation”

USS WASP Commanding Officer





# Laundry Innovations



## ◆ Electric Laundry

- On FFG7, DDG 993, CG47, others
- Simpler
- Easier to Maintain
- Equip all but Dryer

## ◆ Modular Laundry

- Electric and Steam avail
- Elims access cuts
- Accomplished anytime
- Has been successfully installed
- Equip
  - ☞ washer, dryer, presses

# Moving into 21st Century

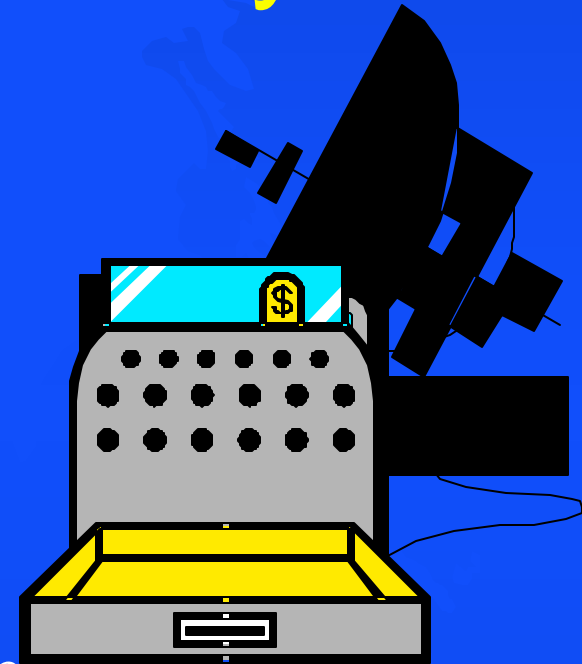
## ◆ ROM II Electronic Point of Sale

- Hardware
- Software
- Better Service

## ◆ EDI

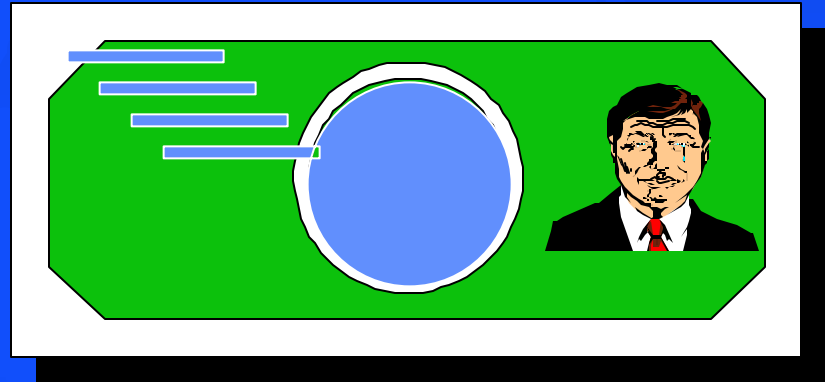
- Quicker, faster, better, more responsive

## ◆ Systems require broadband connectivity end to end



# Electronic Money

- ◆ Navy Cash Cards
  - eliminates cash
  - reduces theft
  - Tests are positive
  - At all retail locations
- ◆ ATM Banking at Sea
  - Eliminates Cash
  - Crews learn to love it





# Design Elements that would improve life on ship for service provider

- ◆ Hatches: Increase size to greater than 26 inch
- ◆ Services Mall area: Place QoL service areas together to facilitate design & workload
- ◆ Vertical shaft elevators from outside to central storeroom locations able to move pallet loads
- ◆ Horizontal move aids to move stuff the length of the ship (Eliminate the “one box” move syndrome)
- ◆ Elimination of stock pathways through “air lock” areas
- ◆ Bringing broad bandwidth to ships

# How Do We Help Each Other

- ◆ Support S-3 / QoL with good designed spaces to provide QoL in 21't century
- ◆ Think ship livability vice just “war machine”
- ◆ Design teams are a QoL advocate
- ◆ Good Design, Good Design, Good Design by talking to the Program Managers, Fleet and Users



# Key Issues



- ◆ #1: Design drives workload
  - Failure on DDG-51
  - Good Hope for LPD-17
- ◆ # 2: Configuration Control: Use it or Lose it
- ◆ #3: High Priority on Service Activities to support War Fighter and 21't century Sailor

**Design Teams**



**FLEET**

**Ships Store  
Program**

